Nova Scotia Department of Natural Resources

Business Plan 2003-04

Report DNR 2003-1
April 2003

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1 Message from the Minister and the Deputy Minister

As the Minister and the Deputy Minister of the Department of Natural Resources, we are pleased to share with you the department's business plan for 2003-04. The plan describes the intentions and commitments of Natural Resources from April 2003 to March 2004. The priorities outlined in this plan were developed to support the government's business and fiscal plans, and reflect the department's budgetary allocation.

The department is committed to the stewardship and sustainable management of our natural resources and Crown lands using environmentally responsible approaches to resource management and land use planning. Through sustainable management we provide support to the provincial economy and encourage economic growth, while meeting our protection related responsibilities. This support will be a major focus of the department's programs and activities for the upcoming year.

We are committed to the implementation of this business plan. As we move forward as stewards of our natural resources we ask for your support to help make Nova Scotia an attractive place to live, visit, and do business.

original signed by

Honourable T.A. Olive
Minister of Natural Resources

Date:

original signed by

D.J. Graham
Deputy Minister of Natural Resources

Date:

2 Mission

The mission of the Department of Natural Resources is "to build a better future for Nova Scotians through responsible natural resources management".

3 Planning Context

The department has broad responsibilities relative to the development, management, conservation and protection of forest, mineral, park and wildlife resources and the administration of the province's Crown land.

The department is affected by many pressures, both external and internal, that require attention. The department's plans for 2003-04, and in subsequent years, will attempt to deal with these pressures. Six areas which will especially impact the departmental plan are listed below.

3.1 Increased Competing Demands for a Limited Land and Resource Base

A principal responsibility of the department is the management of provincial Crown lands in the province. Nova Scotia has the second lowest proportion of Crown lands of all the provinces and territories. There are strong public expectations, and numerous competing demands, for the use of this limited public land and resource base, and how it is managed.

There is also pressure to add to the provincial Crown land base. The urbanization of the central part of the province has led to demands to limit Crown land resource development and to provide additional park facilities close to the population base.

3.2 Demographic Change

Since 1986, the population has become increasingly concentrated in the central part of the province, in Colchester, Halifax, Hants, and Kings counties. Statistics Canada figures show that in 1986 about 51% of the population lived in these four counties with the remainder in the other 14 counties. By 2002, the central part of the province accounted for 56% of the population.

Significant changes are also expected in the province's age distribution. Statistics Canada is also forecasting that from 2002 to 2026, the percentage of Nova Scotians less than 20 years of age will fall from 24% to 18% while the percentage of the population 65 years and older will increase from 14% to 24%.

Just as these changes will have major implications for our health and education systems, so too will the demand for many of the department's services and programs be affected by the changing preferences and expectations of a relatively older and increasingly urban population.

3.3 Climate Change and Weather

The unpredictability of nature has a profound influence on the department's operations, and budget requirements, both positive and negative. Forest fires, insect infestations, wildlife and forest health, and park attendance are all affected by weather conditions.

The Government of Canada reports that "...the 20th century was the warmest century of the last millennium; the 1990s were the warmest decade of the last century and the years 1999 and 2001 were the warmest years yet." Climate change may result in longer, hotter, drier summers, increased smog levels, and more extreme weather conditions. Ecosystems may be affected resulting in changes in wildlife habitat and native species health and the possible introduction of exotic pests (non-native wildlife). Our economy, our health, our way of life and our quality of life could all be affected by the results of climate change.

3.4 Deteriorating Physical Infrastructure

The department has seen significant reductions in budget and staffing levels since the mid-1990's. One consequence has been a deterioration in the department's infrastructure as replacements and some maintenance have been deferred. This includes our fleet of vehicles, helicopters, buildings, parks facilities, and equipment. The need to meet budgetary challenges during the past decade has resulted in a deferral of infrastructure maintenance and postponed asset replacement.

3.5 Globalization Impacts

Our resource sectors are a part of the global economy and make up the foundation industries in the province's Economic Strategy. A significant proportion of our provincial exports is accounted for by forestry and mineral products. Although the demand for many natural resources is increasing, prices are cyclical and are frequently volatile. Trade issues, such as the current softwood lumber exports dispute with the United States and pressure for forest

products to receive environmental certification, have a significant impact on the companies that make up our resource industries and how they operate. National developments, such as the federal species at risk legislation, have implications for Nova Scotia.

3.6 Public Perceptions

Many members of the public are unaware of the true extent of the province's foundation industries and how they operate. The forestry and minerals sectors are made up of much more than just wood harvesting and mineral extraction. Exploration, forest management, geoscience, geomatics, survey, mapping, environmental, transportation, distribution, and financial services are all required. The resource sector needs sophisticated machinery and equipment, high technology products, and computers to operate and compete globally. Skilled labour is needed to operate these production systems. Manufacturing, fabrication, and assembly add value to the natural resources found in the province. Nova Scotia's mineral and forestry industries are among the province's leading industries in their application of advanced technology as companies make investments in technology to minimize costs, increase productivity, and improve environmental performance. Some members of the public also do not recognize the efforts being made by the resource sector to operate on a sustainable basis and to meet environmental standards and regulations.

4 Strategic Goals

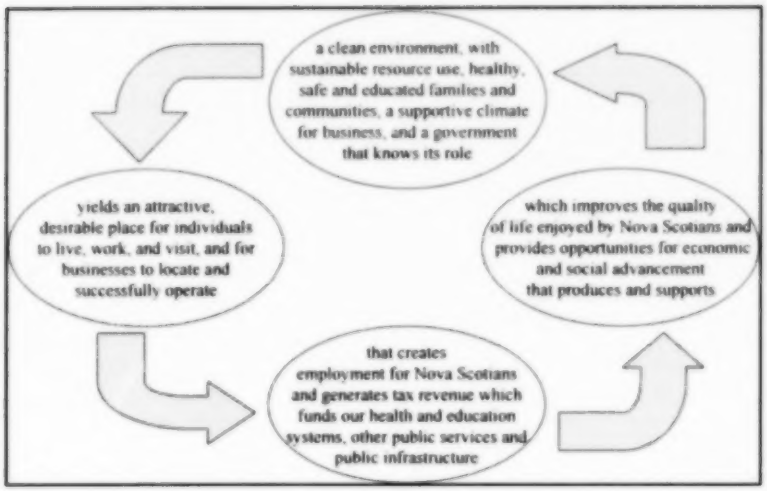
Five broad goals were identified as part of a strategic plan prepared for the department in the mid-1990's. Since then, the goals have been adjusted slightly to better align them with the government's overall goals. The department's goals are:

- to achieve sound natural resources stewardship;
- to conserve the diversity of Nova Scotia's natural environment;
- to support Nova Scotia's economy through the sustainable development of natural resources;
- to improve the quality of life in Nova Scotia; and
- to manage the department's financial, physical, human, and information resources effectively and efficiently.

Government's major priorities, simply stated, are health care, education, and economic growth, within the context of fiscal sustainability and a balanced budget. At the same time, government does have other responsibilities and obligations.

The following diagram shows how government's priorities are supported by the department. Our activities contribute to growth in the provincial economy, one of the government's key priorities for 2003-04, through the responsible development and use of natural resources.

Natural resources provide significant economic, social, cultural, and environmental benefits to Nova Scotians, and the best available scientific knowledge must be used for their sound management. The department's aim is to maintain an appropriate balance so that resource use continues to provide a substantial contribution to the provincial economy (and especially our rural economy), while being carried out in a socially responsible and sustainable manner. Our natural resources are one of the province's features that make it an attractive place to live, visit, and do business. In addition, revenue generated from the resource sector (both directly and indirectly) helps to fund our health and education systems, and other important public services.


a clean environment, with sustainable resource use, healthy, safe and educated families and communities, a supportive climate for business, and a government that knows its role
which improves the quality of life enjoyed by Nova Scotians and provides opportunities for economic and social advancement that produces and supports
that creates employment for Nova Scotians and generates tax revenue which funds our health and education systems, other public services and public infrastructure
yields an attractive, desirable place for individuals to live, work, and visit, and for businesses to locate and successfully operate

5 Core Businesses Areas

The department's activities can be allocated to one of the following core business areas:

- Natural Resources Management;
- Crown Lands Administration; and
- Infrastructure and Support Services.

DNR manages natural resources on an integrated basis. Individual resource sectors are not categorized as a separate core business areas in keeping with our integrated approach to the management of the natural resources falling in the department's areas of responsibility.

5.1 Natural Resources Management

Natural Resources Management covers the department's broad responsibilities relative to the development, management, conservation, use, and protection of forest, mineral, park and wildlife resources.

Forestry-related responsibilities, on both Crown and private lands, include forest management planning and research, developing and implementing strategies to ensure sustainable forests, maintaining the provincial forest inventory, producing data on the province's forest resources, monitoring primary forest production, and coordinating extension programs and support for industry development. On private lands, the department leverages expenditures on silvicultural activities by providing a portion of the funding. DNR also provides technical and professional assistance and information, supports construction of forest access roads, and monitors for compliance with regulatory requirements related to forest harvesting and forest management. On Crown lands, the department administers the licensing of land for timber and other resource uses. Funding is provided to invest in silviculture in order to ensure forest sustainability, and a network of access roads on Crown lands is maintained. Protection-related responsibilities include the development and

operation of programs designed to protect Nova Scotia forests from fire, insects and disease, and to protect special sites and significant wildlife habitats.

Mineral responsibilities include the implementation of policies and programs dealing with exploration, development, management, and utilization of mineral resources. The department develops and implements strategies to support and promote the mineral resource sector, maintains the provincial geoscientific database and inventory of mineral resources, monitors mineral production and monitors for compliance with regulatory requirements, administers mineral royalties and the provincial mineral rights tenure system, coordinates interdepartmental regulatory review of mineral development projects, and provides professional assistance and advice with respect to mineral resources and provincial geology. Geological studies, undertaken to document and understand the province's geology, help to document the province's mineral endowment and define the potential for new mineral resources. These programs also provide needed information to support sound public policy decisions in areas such as mineral resource development, environmental protection, land use, and public health and safety

Park responsibilities include the planning, design, development, and operation of over 120 camping and day-use park, and natural area parks and park reserves, in addition to supporting facilities on Crown lands, various trails and other outdoor recreational opportunities and, through partnerships with community groups, on private lands. Parks and recreation programs and services provide quality recreational experiences to Nova Scotians and visitors to the province, while ensuring environmental, heritage and resource protection.

Wildlife responsibilities include research, development and delivery of programs, policies, and legislation for the management and conservation of the province's wildlife resources and their habitats, including endangered species initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. This also includes the provision of educational and viewing opportunities at the provincial wildlife park in Shubenacadie.

Enforcement responsibilities include the development, coordination and operation of a departmental resource law enforcement and compliance program, which also provides enforcement services to the Department of Agriculture and Fisheries, the protected areas program within the Department of Environment and Labour, and the Canadian Wildlife Service.

5.2 Crown Lands Administration

This core business area covers the department's activities related to the administration of the province's Crown lands. Crown Lands Administration encompasses the acquisition, leasing and disposal of interests in Crown lands, co-ordination of government surveying requirements, carrying out Crown lands boundary line maintenance, maintenance of provincial Crown lands records and the Crown lands GIS cadastral database.

Nova Scotia's land mass is approximately 13 million acres, of which about 3.5 million acres are administered and controlled by the Department of Natural Resources as provincial Crown lands (some other departments, like Transportation and Public Works, also administer land holdings, such as highways and land with provincial government buildings). The department is also responsible for submerged lands, both inland and along the province's nine thousand kilometres of coastline. Approximately 20 land-related statutes are administered by the department, as well as the provision of land-related services, such as

land administration and designations, to other departments and activities undertaken in partnership with non-government conservation oriented organizations aimed at securing ecologically significant lands.

5.3 Infrastructure and Support Services

Infrastructure responsibilities include the maintenance and replacement of a fleet of approximately 700 highway and other specialized vehicles (such as fire trucks, snowmobiles, ATVs, and tractors), as well the operation, maintenance and replacement of five helicopters. The road vehicles are heavily used in every aspect of the department's program delivery, such as fire suppression and enforcement, and provide a range of capabilities from personal transport to heavy equipment operations. The helicopters are used for forest fire detection and suppression, ground search and rescue, natural resource management, and transportation of government personnel. The DNR fleet (particularly helicopters) play an important role in the province's emergency preparedness planning. Department facilities range from offices and depots, to pole barns, aircraft hangars and fire towers.

Central support services includes human resources, information technology, financial, communications, legal, planning, asset management, risk management, records management, office administration, library services, and the Office of the Minister and Deputy Minister. As the host department for the Resources Corporate Services Unit, financial services, human resources, and information technology are provided to the Department of Agriculture and Fisheries, the Department of Environment and Labour, the Department of Energy, and a number of agencies. Several other departments and agencies also receive certain services from the Resources Corporate Services Unit.

6 Priorities

The following are the main priorities that have been identified for the Department of Natural Resources for 2003-04. Priorities are grouped within the core business areas previously identified. These priorities are above and beyond the department's regular on-going operations.

6.1 Natural Resources Management

Priorities for this core business area are primarily related to the department's on-going responsibility for sound natural resource stewardship.

6.1.1 Implementation of the Forest Strategy

The Forest Strategy consists of nine major policy, program and regulatory elements which were to be implemented over five years. Its focus is the achievement of sustainable forestry and forest use in the province. In 1998, changes were made to the *Forests Act* to support sustainable forestry and to provide the authority needed to begin to implement the Forest Strategy. The focus for 2003-04 will be to complete the implementation phase of the Forest Strategy. Most regulatory, policy and program elements are now in place. Specific priorities listed below relate to completing the remaining two elements, revising aspects of previously implemented elements, and monitoring compliance.

- Emphasis will be placed on completion of the Code of Forest Practice. The Code of Forest Practice framework document will be made available for public review and comment. Following the review and receipt of comments, guidelines and technical manuals will be developed. The Code of Forest Practice, when complete, will provide a framework for planning and conducting forest management operations.

- The first State of Forests report will be prepared and released. This report will provide the forestry industry and the general public with up to date information on the condition of Nova Scotia's forests.

- The final steps in the development and testing of enhancements to the Wood Buyers Registry database, designed to incorporate the wood acquisition plan component, will be undertaken. Further emphasis will be placed on enhancing the support programs and processes within our forest inventory geographic information system to manage forest harvest monitoring and silviculture information submitted to the department.

- The department is committed to regular monitoring and review of the Forest Strategy components and to making adjustments which improve the effectiveness of individual elements and the overall Forest Strategy. In this context, revisions are being proposed to both the *Registration and Statistical Returns Regulations* and the *Forest Sustainability Regulations*.

- The department will emphasize regular client liaison to identify issues and define solutions. The Forest Technical Advisory Committee is the mechanism for representing the views of different stakeholder groups during the implementation of the Forest Strategy.

- The effectiveness of the Forest Strategy will be further enhanced through systematic compliance monitoring and enforcement actions.

6.1.2 Support the Mineral Industry and Other Geoscience Information Users

The department provides programs, services and information that are utilized by the province's mineral industry and by a number of other groups and the public. Departmental priorities for 2003-04 are:

- Department staff will work to provide for a continuing coal industry in Cape Breton by addressing the re-issuing of coal leases following their surrender by the Cape Breton Development Corporation (CBDC). Staff will have discussions with officials of CBDC and the federal government in an attempt to ensure that provincial requirements under the *Mineral Resources Act* for remediation and reclamation of CBDC lands disturbed by coal mining in the Sydney coalfield are properly planned and initiated.

- It is anticipated that the amendments to the *Mineral Resources Act* and regulations will be proclaimed. Following proclamation, the department will begin a thorough review of the legislative framework for mineral exploration and development in the province with the objective of making significant revisions to the *Mineral Resources Act* and improving the management and administration of all mineral resource commodities in the province.

- In cooperation with the Office of Economic Development, a process to develop a mineral development strategy will be initiated, including a review the province's mineral policy and development of an action plan to ensure that the department's programs are focused on supporting and encouraging economic development related to the use of geological resources. The department will continue to facilitate efficient and effective reviews of mineral development projects through a coordinated "one-window" process, including the provision of scientific, technical and policy advice to other departments.

- The current five year strategic plan for geoscience is coming to an end and a new strategic planning exercise will be undertaken to determine program priorities for the next five years. The department will continue to aggressively seek partnerships with outside agencies including the Federal Government to optimize provincial resources for geoscience programming.

- The department maintains a library of drill core and geological specimens at its Drill Core Library facility in Stellarton. Budgetary cutbacks require implementation of an alternative service delivery at the facility that is commensurate with available resources. A plan for long term service delivery at the core library will be completed and implemented during 2003-04.

6.1.3 Integrated Resource Management Planning on Crown Lands

The department defines Integrated Resource Management, or IRM, to be "a planning and decision-making process that involves the coordination of resource management policies, programs and activities so that long-term sustainable benefits are optimized and conflicts among resource users are minimized." An IRM process is used for Crown lands administered by DNR so that we are able to take into account the relationships between the various resource uses and effects of management practices of one resource upon others.

The IRM process includes two major parts. First, the planning activity identifies special land features, uses and resource values, and incorporates these into databases, goals and objectives for Crown land. An inventory of values has been identified by department staff, other departments and agencies, the general public, and stakeholders. Second, based on the planning information identified, the land use decision making part of the process recognizes and conserves special land features and uses, optimizes long term sustainable resource values, and minimizes conflicts.

The province is categorized in 39 ecodistricts (Sable Island has been added as a separate ecodistrict so the number of ecodistricts has increased by one from the 38 ecodistricts reported in our 2002-03 Business Plan). A Long Range Management Framework (LRMF) is an ecologically based land use planning document. Eventually each ecodistrict will be covered by an LRMF. Work planned for 2003-04 includes:

- the development of ecological management guidelines, which will provide the basis for these LRMFs.

- a pilot project underway for the Mulgrave Plateau ecodistrict will be completed. A draft LRMF for this ecodistrict will be produced using guidelines developed by the department that cover the process to be used when preparing an LRMF.

- an assessment of the guidelines, after the draft LRMF for the pilot project has been completed.

- the identification of the next ecodistricts which will have LRMF prepared.

6.1.4 Provide an Effective Parks and Recreation Program

The department supports the planning, design, development and operation of more than 120 camping and day-use parks, in addition to providing trails and other outdoor recreational opportunities on Crown land. During the fiscal year a number of initiatives and activities are planned.

- The "Operational Standards and Guidelines" will be reviewed and updated to reflect current facility and infrastructure management requirements. This document is utilized in the day to day operations and maintenance of provincial parks.

- Securing additional resources for the long-term use and public access is an important aspect of park development. The department will identify park and outdoor recreation opportunities that become available, and that support program objectives, including outdoor recreation experiences and the protection of unique and desirable cultural and heritage values.

- Part of the park development process involves preparing individual management plans for properties in advance of any significant on site development taking place. Management plans provide the context for future development by establishing the opportunities and constraints that exist. For 2003-04, management plans are expected to be completed for several properties including Crystal Crescent, Cole Harbour Heritage Park, Second Lake, West Mabou, and Maitland. The development of management plans for several other properties, including Cape Split and Long Lake, will continue during the year but are not expected to be completed.

- Partnerships are a key aspect of furthering community involvement and commitment to park development and are another avenue in securing the long-term sustainability of parks. A number of partnerships are in place. During 2003-04 the department will maintain our existing partnerships, and provide various park services in cooperation with these partners. As management plans for individual properties are completed, new partnership agreements are expected to be reached with community groups for Crystal Crescent and the Cole Harbour Heritage Park. A key property for future partnerships and development opportunities is McNabs and Lawlor Islands Provincial Park located in the centre of Halifax Harbour. The department will also work with other government departments to address cross jurisdictional mandates.

- The department will work with the Halifax Regional Municipality and the Shubenacadie Canal Commission to manage public areas and access points along the Shubenacadie Canal. A long range plan to secure infrastructure maintenance and development will be prepared in cooperation with the Shubenacadie Canal Commission. The department will assist the Shubenacadie Canal Commission in their efforts to identify and secure new partnerships in support of their mandate.

6.1.5 Conserve Wildlife and Wildlife Habitat

The promotion and implementation of the principles and ethics of conservation and sustainable use of wildlife populations, habitats and ecosystems in Nova Scotia is a priority of the department. This includes research, development and delivery of programs, policies, and legislation, including species at risk initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. Also included is the provision of educational and viewing opportunities at the provincial wildlife park in Shubenacadie. Specific priorities are listed below.

- The department will support the implementation of the National Accord for the Protection of Species at Risk, the Nova Scotia *Endangered Species Act* and the federal Species at Risk Act. This will be done in part by evaluating the status of species, listing new species as necessary, initiating recovery plans for any listed species, and engaging in recovery actions.

- Monitoring and regulation of harvested wildlife populations, such as deer, moose, and small game, and working cooperatively at provincial, national and international levels will help to ensure conservation and sustainable use.

- The department will work with partners in projects such as the Eastern Habitat Joint Venture, the Black Duck Joint Venture and the Sea Duck Joint Venture as part of Nova Scotia's commitment to wetland and waterfowl conservation under the North American Waterfowl Management Plan.

- DNR will manage the Habitat Conservation Fund and the Species at Risk Conservation Fund. These provide funding for non-government organizations to undertake important wildlife conservation projects. Projects that qualify for funding will be chosen during the year.

6.1.6 Utilize Department Information and Expertise

The department has a considerable amount of scientific and technical information available. Several department priorities for 2003-04 relate to our use of this natural resources-related knowledge and information, as well as activities aimed at making it easier for others to access and use our information.

- The availability and utility of digitally-based geoscientific information on the web will be improved during the year. The department will also work with municipalities, community groups, rural development authorities and others to increase their use of geoscientific and mineral resource information in land and resource use decision making.

- Improvement of public safety will be addressed by continuing the program to cap and/or fill abandoned mine openings on Crown lands. As part of this program, the department will provide information and advice on abandoned mines to private landowners and municipalities. Remediation of high risk abandoned mine openings on Crown lands will be undertaken, although the amount carried out will depend on the availability of funding and the complexity of the sites being remediated.

- Educational material will be provided to youth, educators, resource sector clients, the media, and the general public on sustainable and responsible resource management and use practices, department programs, and changes in legislative requirements.

6.1.7 Meet National Obligations

The department is working with the federal government and other provinces on a number of areas. Specific activities planned for 2003-04 include the following.

- The department is participating in the development of a National Forest Information System for Canada, which will be capable of making forest information from a wide range of sources available to the public. Nova Scotia places a priority on cooperating on the project and is developing the forest information necessary to contribute to a National Forest Inventory, which will be distributed through this information management system. All provinces have placed a priority on developing a new National Forest Strategy through a process involving extensive stakeholder participation.

- The department is a participant in a federal-provincial-territorial initiative to develop a Canadian Geoscience Knowledge Network. This initiative will make the information holdings of all Canadian government geoscience agencies available in compatible digital formats over the Internet. An initial version of a catalogue of data holdings of all participants will be released in 2003-04 and will include information about Nova Scotia's geoscience data holdings.

- The department is participating in the National Orphaned and Abandoned Mines Program. This program is a joint industry-government initiative to address the legacy of orphaned/abandoned mines in Canada with all the associated issues such as environmental liability, human health concerns and the financial cost of clean-up. The department is developing information on orphaned/abandoned mine sites in Nova Scotia as part of the compilation of a national inventory as a first step in this Program.

- Nova Scotia is hosting the annual Energy and Mines Ministers Conference in September 2003. Planning for this conference is underway by a team of officials from DNR and the Department of Energy. As host of the conference, DNR has a number of responsibilities during this year including chair of the Intergovernmental Working Group on the Mineral Industry, chair of the Committee of Provincial Geologists, and chair of the Director of Mines committee.

6.1.8 Provide Forest Protection Services

Protection of Nova Scotia forests from fire, pests and disease is mandated through the *Forests Act* and is a continuing priority for the department. The extent of forest fires and pest occurrences in the province can vary considerably from year to year and can place a considerable burden on the department's budget. There is a need to restructure these programs to ensure that they address current and future requirements and are capable of functioning effectively within budgetary limitations. Specific priorities are listed below.

- A review of the fire management program was initiated during 2002-03 and will continue into 2003-04. This review will ensure the most effective use of resources.

update practices and procedures, and ensure that procedures and agreements are in place to work effectively with associated organizations.

- A similar program review will be completed for the integrated pest management program. A priority within this program will be the development of a pest risk assessment and management regime for Nova Scotia.

6.2 Crown Lands Administration

Priorities for this core business area are related to the administration of the province's Crown lands. These include updating several pieces of legislation, acquiring additional land, the distribution of land information, and meeting operational obligations and demands for service.

6.2.1 Provide an Up to Date and Responsive Legislative Framework

The effective administration of Crown land depends upon the existence of an up to date legislative and policy framework. Work planned for 2003-04 includes the following.

- A draft of a new *Trails Act* was prepared in the fall of 2002 which included a streamlined process for formal registration of community trails and limited liability for community trail operators. In co-operation with the Sport and Recreation Commission and the Nova Scotia Trails Federation, a consultation process will occur to obtain input from trail interests. A final draft is expected to be ready for possible consideration by the legislature in the fall of 2003.

- A review of the current *Beaches Act* and related policy issues is currently underway and will be completed during 2003-04, along with an examination of the legislative regimes being utilized in other jurisdictions. Options will be developed for consideration.

6.2.2 Improve Opportunities for Land Acquisition

In 2002-03, the department had a Tangible Capital Asset (TCA) allocation of $1 million to support acquisitions on behalf of DNR and DEL. In addition, a special allocation of $5 million supported the acquisition of Cape Split. There is continued pressure to add other properties valued by Nova Scotians to the Crown land base. The following activities are planned for 2003-04.

- Subject to the availability of TCA funding, the department will acquire coastal lands, wilderness area inholdings for DEL, and other properties that support department and government initiatives and programs. Partnerships with non-government conservation organizations (such as the Nature Conservancy of Canada), resulting in the leveraging of private sector funds for land acquisition, will also be encouraged and supported.

6.2.3 Improve Access to Land Information

The department holds a considerable amount of land information. However much of this information is paper-based, which limits its usefulness. The following activities are planned for 2003-04 in order to allow the improved utilization of Crown land information and to facilitate access by users of this information.

- Continued integration of Crown land information with the resource specific geographic information system databases within the department, and improving the availability of Crown land information remains a priority. Expanding the availability of this information internally within the department is being pursued. Work is also being carried out on the conversion of paper based records to an electronic format.

- Planning for the migration of Crown lands into the new Land Registration system (Registry 2000) will be a priority. Department staff will work with Service Nova Scotia and Municipal Relations to develop a process and a schedule for this migration. Depending upon the agreed upon process and timing, the availability of Crown grant information via the Internet will be accelerated.

6.3 Infrastructure and Support Services

The department has a considerable investment in buildings, other facilities, and equipment necessary for its on-going operation. The maintenance, and the occasional replacement, of these facilities and equipment is an on-going priority.

6.3.1 Infrastructure / Equipment Maintenance and Replacement

A number of projects have been identified as priorities for repairs or replacement during 2003-04. This includes activities related to various departmental offices, depots, park facilities, roads, parking lots, the Bell 212 helicopter, helicopter landing areas, and a range of other planned work.

6.3.2 Implement Planned Support Services Initiatives

There are some specific projects being implemented during the coming year. Major priorities planned for 2003-04 include the following.

- A new records management system will be implemented during the year. This system will enhance record management capabilities within the department by providing department staff outside Head Office with access to an electronic system.

- A network will be installed for the Coxheath office, which is the department's main office in the Eastern Region. This network will provide staff with a significant improvement in information technology capabilities, including much better access to information needed for the IRM Project.

7 Budget Context

The following table provides budget information for the department.

Department of Natural Resources - Estimated Budget Expenditures *			
	2001-02	2002-03	2003-04
	$ Millions	$ Millions	$ Millions
Total - Gross Expenses	$56.3	$59.3	$61.6
Total - Net Program Expenses	$53.9	$57.0	$59.2
Salaries and Benefits	$34.9	$37.3	$38.6
Funded Staff (in Full Time Equivalents)	849	863	847

* Note that the cost of services provided through the Resources Corporate Services Unit (financial, human resources, and information technology services) to a number of other government departments and agencies is included in the budget of the Department of Natural Resources.

8 Outcome and Performance Measures

The information provided in the following tables is for some of the important measures that help to provide an indication of the department's success in meeting our goals. Outcome and performance measurement is an evolving process. Some of the measures provided track outputs (what was done) as opposed to outcomes (what results were achieved).

Over time we expect to gradually improve this performance measurement section by replacing some of the output focused measures with other measures that give a better picture of our success in achieving desired outcomes. Several new measures have been added this year, and several other measures have been revised as part of this gradual improvement.

More detail on performance measures can be found on the department's website. This material was released in December 2002 as a supplement to the department's 2001-02 Accountability Report. The location for the information on these measures is http://www.gov.ns.ca/natr/outcomes and this information will be updated when the 2002-03 Accountability Report is released later in 2003.

DNR Performance Measures

Core Business: Natural Resources Management				
Outcome	**Measure**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Sound Natural Resources Stewardship	Percentage of Crown land with Long Range Management Frameworks in place	0% (2002)	50%	•• Devote resources to IRM teams, enhancing capacity in GIS and modeling, to facilitate the completion of Long Range Management Frameworks (LRMFs).
	Number of "Species at Risk" partnerships in place as of March 31	5 (2002)	10 to 15	•• Establish partnerships to enable protection or recovery of species at risk.
	Area of wetland influenced by wetland stewardship agreements concluded during the year (hectares) (see Note 1 below)	497 (2001-02)	300	•• Work within the Eastern Habitat Joint Venture to establish wetland stewardship agreements.
	Number of Registered Buyers participating in Forest Sustainability Agreements during the year	35 (2002)	70	•• DNR staff will promote the development of Sustainability Agreements with the forest industry.
	Number of teachers and students receiving natural resources stewardship related training at the Wildlife Park annually	3,809 (2001-02)	7,500	•• Provide effective wildlife education programs for school groups with the opportunity to see the animals which are part of the lesson.
	Number of teachers and students receiving natural resources stewardship related training at the Natural Resources Education Centre annually	6,603 (2001-02)	8,000	•• Provide teacher in-service and professional development workshops. •• Deliver education programs for school and youth groups at the Natural Resources Education Centre in Middle Musquodoboit.
	Percentage of province for which forest resource data is ten years old or less	86% (2001)	100%	•• Annual updating of forest inventory from air photograpny and satellite imagery. •• Measurement of permanent sample plots. •• Conversion of data into GIS database.
	Percentage of province for which geological maps are less than 25 years old	85% (2001-02)	85%	•• Prioritize geoscience mapping projects to address areas for which data are more than 25 years old. •• Maximize the efficiency of re-mapping areas for which older data exist.
	Number of new mineral occurrences added annually to the provincial mineral occurrences database	10 (2001-02)	10	•• Continue existing program to locate, catalogue and describe mineral occurrences. •• Maximize efforts to acquire data on newly discovered occurrences, as opposed to updates of data for known occurrences. •• Develop and implement a new, Internet-based computerized database for clients within and outside government.
	Percentage of province for which aggregate resource information is less than 20 years old	30% (2001-02)	50%	•• Continue existing program to locate, catalogue and describe bedrock and surficial aggregate resources. •• Focus program on areas in province for which new aggregate resources are critical to economic development.

Core Business: Natural Resources Management				
Outcome	**Measure**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Conservation of Ecosystem Function	Percentage compliance with *Wildlife Habitat and Watercourses Protection Regulations* under the *Forests Act* (see Note 2 below)	NA	90%	•• Promote and enforce Regulations, including providing training and demonstrations. •• Measure compliance.
	Percentage of park area meeting IUCN protection and natural areas criteria as of March 31	70% (2001-02)	70%	•• Identify properties for designation and prepare documentation. •• Currently 10,470 hectares out of 14,900 hectares meets IUCN (International Union for Conservation of Nature and Natural Resources) criteria.
	Percentage of active mine sites practicing progressive reclamation	58% (2001-02)	65%	•• Promote progressive reclamation with mine operators.
Species Diversity	Percentage of endangered and threatened species with recovery plans in place (see Note 3 below)	92% (2001)	100%	•• Create Recovery Teams for each listed species and provide support in developing Recovery Plans.
Public Safety	Number of students successfully trained annually	1,062 (2001-02)	maintain	•• Deliver hunter, bowhunter, and trapper education courses.
	Number of high risk abandoned mine shafts remediated annually on Crown lands (see Note 4 below)	(2002-03)		•• Maximize available funds through partnership programs. •• Remediate mine shafts with available funds.
	•• Abandoned Mines Program	28	14	
	•• through partnerships	40	30	
	•• cooperation within government	2	0	
Effective Management of Resource Supply	Amount of silviculture investment on small private woodlots annually (millions of $)	$8.3 (for 2002)	$9.0	•• Work with the forest industry to assist them in achieving full compliance with requirements of the *Forest Sustainability Regulations*. •• Leverage private sector silviculture funding through Forest Sustainability Agreements.
	Percentage of required value of silviculture on private and industrial lands completed during the current year (see Note 5 below)	100% (2001)	100%	•• Implementation of Forest Strategy / *Forest Sustainability Regulations*. •• Wood supply analysis / GIS system analysis. •• Audits, monitoring and compliance programs. •• Registry of Buyers. •• Communication and information initiatives.
	Area of forest resource lost to fires annually (hectares) (see Note 6 below)	211 (2002)	1,014 (less than)	•• Fire detection system / fire prevention / fire suppression. •• Acquisition and deployment of fire suppression resources. •• Cooperation with volunteer fire departments, industry fire crews and municipalities.
	Review of hunting / trapping regulations completed annually	1 (2001-02)	1	•• Monitor wildlife populations with potential for over or under harvest. •• Consult with stakeholders. •• Recommend regulatory amendments.

Core Business: Natural Resources Management				
Outcome	**Measure**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
Effective Management of Resource Supply	Percentage of mineral related acts and regulations reviewed in the last five years	100% (2001-02)	100%	•• Regularly assess all mineral related legislation as they are utilized. •• Schedule detailed assessments as required and identify and recommend necessary changes.
	Percentage of "One Window Interdepartmental Committee meetings held within three weeks of receipt of request (see Note 7 below)	NA (2001-02)	100%	•• Continue dialogue with mineral sector clients on the importance of the One Window process to ensure submission of comprehensive applications. •• Continue interaction with other government departments to ensure timely meetings and decision-making by the One Window Committee.
Awareness of Resource Development Opportunities	Number of parks related partnerships as of March 31	7 (2001-02)	increase	•• Identify partnership opportunities within the park system. •• Seek potential partners to develop and/or manage new parks. •• Seek partners to upgrade park facilities and services.
	Number of mineral development partnerships with provincial, municipal and regional development agencies	0 (2001-02)	5	•• Pursue opportunities to inform other government departments, municipal governments and Regional Development Authorities of the potential for mineral developments in their jurisdictions. •• Provide sound, objective technical advice to other government departments, municipal governments and Regional Development Authorities on proposals for mineral development.
	Number of requests annually for technical information and assistance from other government departments, regional development agencies, prospectors, developers, and mining companies	300 (2001-02)	300	•• Participate in provincial, national and international conferences and trade shows. •• Increase amount of mineral promotion information on the departmental website. •• Maintain a close liaison with the Office of Economic Development.
	Number of downloads annually of technical geoscience information from the departmental website (thousands)	11.1 (2001-02)	15.0	•• Continue ongoing program to post new geoscience information (maps, data and reports) on the departmental website. •• Advertise availability of information at conferences and workshops and through department and external publications.
Recreational Opportunities	Area of designated provincial parks as of March 31 (hectares)	14,900 (2001-02)	increase	•• Efficient and effective operation of provincial parks. •• Identify potential properties for designation under the *Provincial Parks Act*.
	Length of trails in parks and on Crown lands as of March 31 (kilometres)	424 (2001-02)	540	•• Work with partners to develop additional trail opportunities. •• Develop partnerships to facilitate development of additional trails.
Appreciation of Natural Resources	Number of visitors to Shubenacadie Wildlife Park annually (thousands)	98 (2002)	90 to 100	•• Provide a natural setting with appropriate enclosures for animals. •• Provide educational messages to ensure people get a good understanding of NS wildlife.
	Annual occupancy rates at provincial camping parks	33.0% (2002)	38%	•• Upgrade facilities and services (market readiness). •• Improve client services. •• Work with the Department of Tourism and Culture to increase the promotion of provincial parks.

Core Business Area: Crown Lands Administration				
Outcome	**Measure**	**Data**	**2004-05 Target**	**Strategies to Achieve Target**
A Modern and Efficient Land Administration System	Percentage of acts, regulations, and policies reviewed during last five years as of March 31 (see Note 8 below)	46% (eleven of twenty-four) (2001-02)	65%	•• Regular assessment of all land administration acts, regulations, and policies as they are utilized. •• Schedule detailed assessments as required and identify necessary changes.
	Percentage of main DNR offices able to access Crown land information electronically as of March 31	0% (zero of seven) (2001-02)	100% (seven of seven)	•• Continued implementation of IT infrastructure and software needed to permit access to Crown land information electronically. •• Seven DNR offices have been identified as requiring access to Crown land information. These offices are: head office in Halifax, regional operations in Bridgewater, Truro, and Coxheath, parks in Belmont, forestry in Truro, and wildlife in Kentville.

Performance Measures Notes:

1. Wetland Stewardship Agreements frequently cover large, discrete blocks of land. As a result, it is difficult to set a target for this measure. The department feels that arranging stewardship agreements covering 300 hectares in total annually is a reasonable target.

2. The *Wildlife Habitat and Watercourses Protection Regulations* came into effect in January 2002. Since then, the department's focus has been on educational programs for the forestry industry and woodlot owners that explain how the Regulations protect ecosystem function. Compliance monitoring will begin in 2003 and figures for this measure will be available for 2003-04.

3. The percentage of endangered and threatened species with recovery plans in place is a measure that was created by combining two measures used in the past that reported endangered species and threatened species separately. Once a species is designated under the *Endangered Species Act*, the department has one year to put a recovery plan in place for an endangered species and two years for a threatened species. All endangered and threatened species designated in 2000 and 2001 have recovery places in place with the exception of the Eastern Mountain Aven. This plant does have a draft plan that is being used.

4. The measure for the number of high risk abandoned mine openings remediated annually has been expanded to better account for the amount of work being done in this area. Previously only mine shafts that were filled were included, however a significant number of mine shafts have also been fenced, which has required a considerable amount of resources. In addition, work has been completed outside the Abandoned Mines Program, either through partnership arrangements with companies doing work on Crown land, or elsewhere within government when dealing with emergency situations requiring immediate attention and remediation action. It was felt that it was appropriate to expand the measure to reflect these additional accomplishments.

5. After the *Forest Sustainability Regulations* came into effect, the requirement for registered buyers to carry out silviculture activities was phased in during a transitional period. Requirements during the transitional period were set at less than the 100% level required after the transition period ended. However the intention of this measure was to track the aggregated compliance of individual buyers in meeting their obligations. Each buyer would have a specific amount of silviculture they were responsible for and they were expected to complete 100% of this amount.

6. For this measure the term "target" is inappropriate terminology. A more accurate description would be to describe it as a expected ceiling. The area of forest resource lost to fires annually can fluctuate considerably from year to year. A target is difficult to set since a year with one or two large fires easily exceed any target by a significant amount. Our ceiling is based on a ten year average and can be viewed as an upper limit we hope to stay below. However the very nature of a ten year average (moving averages) means that there will be some years below the average and some years above the average.

7. This measure tracks one aspect of service to clients, by measuring the timeliness of One Window reviews of mining projects.

8. This measure was expanded to take include policies that are used to administer Crown lands (some of these affect private lands as well).